



Final Report - Forest Practices Board

Sewell Inlet Timber Sale: Appropriateness of the Silviculture Prescription

Complaint 970110
November 1998
FPB/IRC/09

Table of Contents

Investigation

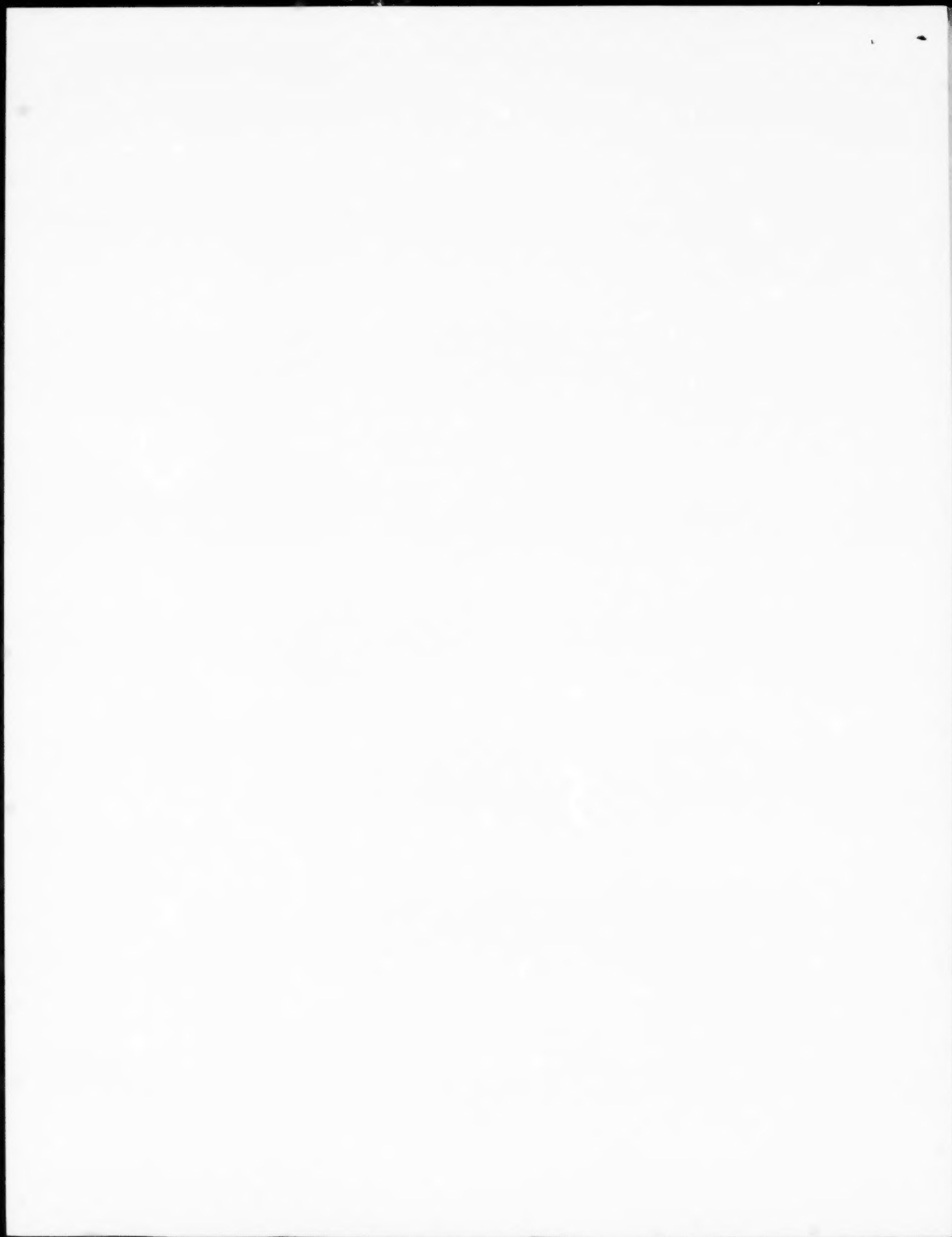
Method of Investigation

Investigation Findings

Compliance with Code Requirements
The Board's Evaluation of the Regional Manager's Decision

Conclusion

| [Return to Investigation Reports](#) | [Home](#) |





**Forest Practices Board
Final Report – Complaint 970110**

The Investigation

The complainant was the successful bidder on a Small Business Forest Enterprise Program timber sale near Sewell Inlet, on Moresby Island. The timber sale document and the silviculture prescription specified skyline yarding as the preferred logging method, with helicopter yarding as the alternative method. In November 1996, the complainant began harvesting and concluded that part of the 14.9 hectare cutblock could not be harvested using a skyline system without damaging the soil because of poor deflection. This means that the slope was relatively flat, and skyline yarding would cause logs to be dragged along the ground (ground lead) instead of being suspended in the air.

Fearing that he would cause excessive soil disturbance if he used the skyline system, the complainant brought his concerns to the attention of the Ministry of Forests. The complainant also advised the Board of his concerns in April 1997, but did not file a formal complaint at that time.

After several inspections by Queen Charlotte Islands Forest District compliance and enforcement personnel, and an inspection by the regional harvest methods forester, the district manager did not change the silviculture prescription to specify helicopter logging as the preferred logging method.

The complainant subsequently yarded the wood from a portion of the cutblock by helicopter to avoid excessive soil disturbance.

On May 11, 1998, the complainant submitted a complaint to the Board asserting that the cutblock had been improperly laid out, and harvesting could not have been carried out as prescribed without causing site degradation. The complainant was concerned that he would have caused excessive soil disturbance in a part of the cutblock if he had relied exclusively on the prescribed skyline system.

The complainant requested a statement that the block was improperly laid out for small business contractors, and a stumpage rebate. The complainant was informed that the Board does not have the authority to provide stumpage rebates.

Method of Investigation

The Board decided that the investigation would examine the content of the silviculture prescription and the decision by the district manager to approve it, since the silviculture prescription describes the preferred and alternative harvest methods, and sets limits on site degradation. Three main questions were addressed:

Did the silviculture prescription comply with the requirements of the *Forest Practices Code of British Columbia Act* and related regulations (the Code) with respect to site disturbance and harvest method?

Did the silviculture prescription prescribe an appropriate harvest method for the area that was ultimately logged by helicopter?

Was the district manager's decision to approve the silviculture prescription reasonable?

To answer these questions, Board staff reviewed the silviculture prescription, and visited the site on August 10, 1998.

Investigation Findings

Compliance with Code Requirements

The silviculture prescription was approved by the district manager on October 20, 1995, during a transition period for implementation of the Code. At the time, transitional provisions required that the prescription comply with sections 10 to 14 of the pre-Code *Silviculture Practices Regulation*.

Section 10(d) of the *Silviculture Practices Regulation* stated that a prescription must facilitate protection of the soil. Section 11 stated, in part, that a pre-harvest silviculture prescription must include the silvicultural system, the timber harvesting method and any constraints on the method.

Section E of the silviculture prescription for the cutblock, entitled "Site Disturbance and Soil Conservation," stated:

"Soil disturbance from ground lead will increase soil displacement, forest floor displacement and accelerate surface soil erosion. Minimizing ground lead by ensuring adequate deflection is very important. If skyline yarding cannot provide adequate soil protection, helicopter yarding will become the only viable option."

An amendment to Section E, also approved on October 20, 1995, stated that the maximum allowable site disturbance due to hoe trails, gouges and scalps was five percent.

Section J, entitled "Harvesting," stated:

"Limited site disturbance is anticipated on the opening from skyline yarding ground lead. Upon completion of harvesting a survey will be completed and all areas with surface soil disturbance will be mapped and treated by grass seeding.

If excessive ground disturbance as defined by Vancouver Circular 94-574 occurs, the Ministry of Forests will direct the yarding contractor to utilize the alternative yarding system, set tailholds higher on the slope or set a spar tree as the tailhold. As well yarding can be prescribed as occurring from the top of the opening downhill. Felled timber will protect the site from degradation by ground lead."

The circular did not define "excessive ground disturbance"; however, it stated that no site degradation was allowed in the net area to be reforested. Site degradation was defined as excavated harvest trails, trails compacted more than 10 centimetres, corduroy, and areas larger than 10 metres squared with compaction, puddling, or altered soil structure.

The silviculture prescription stated that the preferred logging method was skyline yarding with stump rigged tailholds or backspar trees. The alternative logging method was specified as helicopter yarding.

FINDING 1:

The silviculture prescription outlined measures to protect the soil, and clearly stated that if excessive ground disturbance occurred, helicopter yarding would be the only option. The prescription also identified the preferred and alternative silvicultural system and logging methods, and constraints on the preferred method.

The silviculture prescription complied with the requirements of the Code with respect to the issues raised in the complaint.

The silviculture prescription *specified* a logging method, but did it prescribe an *appropriate* logging method?

To determine whether the logging method was appropriate, the Board arranged for an experienced contractor who had no prior knowledge of the cutblock to inspect the site. The contractor ran four deflection lines in the area that the complainant yarded by helicopter, and conducted a deflection analysis.

The deflection analysis revealed that some gouging and scouring could be expected in an area approximately 3.9 hectares in size if the skyline system was used. A lack of suitable backspar trees in a portion of the block contributed to poor deflection. However, it was unlikely that skyline yarding would have caused site disturbance beyond the limits set out in the silviculture prescription. In other words, ground leading would have occurred but it would not have caused excessive site disturbance.

Ministry of Forests staff inspected the site on a number of occasions and also determined that ground lead would occur in a portion of the block. However, the ministry's position was that yarding could occur using the skyline system without causing soil disturbance beyond the level prescribed in the silviculture prescription.

The soil characteristics of the area, which include a thin humus layer and a loamy texture, make it prone to surface erosion. This explains why the silviculture prescription stressed minimizing ground lead by ensuring adequate deflection. In this case, minimizing ground lead on the 3.9 hectare portion of the cutblock would best be accomplished if yarding was done by helicopter. However, the silviculture prescription clearly warned of the possibility of helicopter yarding, and also indicated that helicopter yarding was the alternative logging method.

The preferred logging method of skyline yarding with stump rigged tailholds or backspar trees and the alternative logging method of helicopter yarding were appropriate for the cutblock.

The Board's Evaluation of the District Manager's Decision

When a complaint concerns the exercise of discretion by a statutory decision-maker under the Code, the Board generally chooses to comment on the exercise of that discretion. The Code gives decision-makers discretion to make decisions, and the Board reviews these decisions to help ensure that forest resources are managed in the public's interest.

The standards the Board uses in evaluating discretionary decisions is not whether the decision is the best decision. It is:

"Was the decision consistent with sound forest practices, did it achieve the intent of the Code, and was it based on an adequate assessment of available information?"

The Board considers additional factors related to the circumstances of a decision before reaching a conclusion. The Board may also consider whether the decision-making process was fair.

The Board considers these questions in the context of general public expectations about how decisions are made under the Code. In reporting its conclusions, the Board uses the ordinary meaning of terms like "reasonable," "appropriate," "adequate," and "fair." In this case, the Board considered whether it was reasonable for the district manager to approve the silviculture prescription for the cutblock.

Section 41 of the Act states that a district manager must approve a silviculture prescription if it was prepared and submitted in accordance with the Act, the regulations and the standards and if he or she is satisfied that the plan or amendment will adequately manage and conserve forest resources.

The district manager was required to approve the silviculture prescription since it was prepared and submitted in accordance with the Act, regulations and standards, with regards to the issues raised in the complaint. Further, the logging methods proposed for the site were appropriate. Thus it was reasonable for the district manager to be satisfied that the prescription would adequately manage and conserve the forest resources of the area. The decision to approve the prescription was reasonable.

FINDING 2:

It is unlikely that skyline cable yarding would have caused site disturbance beyond the level set in the silviculture prescription. However if excess site degradation had been inevitable, use of the alternative harvest method would have minimized or eliminated any impacts.

FINDING 3:

With regard to the issues raised in the complaint, the silviculture prescription was prepared and submitted in accordance with the Act, standards and regulations, and the information available satisfied the district manager that the prescription would adequately manage and conserve the forest resources of the area.

Conclusion

The silviculture prescription for the timber sale complied with the requirements of the *Forest Practices Code of British Columbia Act*, and associated regulations and standards in place at the time it was approved, with respect to site disturbance and harvest method.

Although skyline yarding would have resulted in ground leading with some associated scalping and gouging in a portion of the block, it is unlikely that site disturbance beyond the levels specified in the silviculture prescription would have occurred. However, if excess site disturbance occurred, the alternative logging method specified in the silviculture prescription (helicopter yarding) would have minimized impacts. The preferred logging method of skyline yarding with stump rigged tailholds or backspar trees and the alternative logging method of helicopter yarding were appropriate for the cutblock.

The district manager's decision to approve the silviculture prescription was reasonable because, with respect to the issues raised in the complaint, it was prepared and submitted in accordance with the Act, standards and regulations, and the district manager was satisfied that the prescription would adequately manage and conserve the forest resources of the area.

Finally, the Board commends the complainant for his efforts to reduce the environmental impacts of harvesting on the cutblock.



